I.I.—Contributions to a further Knowledge of the Rhynchotal Family Lyggeidie. By W. L. Distant.

Astacops subochraceus, sp. n.

Head and pronotum testaceous; the stylated eyes apically black; antennæ black, base of first joint testaceous; scutellum black; corium dull pale purplish, the clavus darker and more nigrescent; membrane glossy black, its apical area pale ochraceous; head beneath pale sanguineous; sternum and abdomen beneath ochraceous, disk of abdomen a little darker and containing a central longitudinal segmental series of mostly transverse black spots; legs black, anterior and intermediate femora-excluding bases-sanguincous; rostrum black; antennæ with the second joint longest, third slightly longer than fourth, which is grevishly pubescent; pronotum with the anterior marginal area transversely broadly earinate, from which a much more slender, central, longitudinal carination extends about midway across pronotum; scutellum strongly transversely carinate near base, and from thence centrally longitudinally earinate to apex; membrane passing the abdominal apex.

Long. 12 mm.

Hab. Queensland (F. P. Dodd). Allied to A. viridiventris, Stål.

Scopiastes turneri, sp. n.

Head reddish ochraceous, apices of the strongly stylated eyes and the apex, or apical area, of the central lobe black; pronotum, broad lateral areas of sternum, scutellum, corium, and membrane black; abdomen beneath pale reddish ochraceous with a broad, sublateral, longitudinal fascia on each side and the apex black; coxe and femora ochraceous, their apices or apical areas and the tibiæ and tarsi black or blackish; antennæ black or blackish, basal joint—excluding apex-ochraeeous, second and third joints longest and subequal in length; eyes very strongly and robustly stylated and a little concavely and upwardly produced; pronotum coarsely and rugulosely punctate; scutellum transversely earinate near base, and thence centrally longitudinally carinate to apex, which is acute; corium thickly finely punctate; membrane about reaching but not passing abdominal apex.

Long. 6-61 mm.

Hab. North Queensland; Kuranda, 1-100 ft. (R. E. Turner).

We have also received this species from the same area collected by Mr. F. P. Dodd.

Allied to S. bicolor, Dist., and S. vitticeps, Horv.

Scopiastes elegans, sp. 11.

Head testaceous, apices of the stylated eyes black; pronotum testaceous with a broad, central, transverse black fascia, the basal area often strongly tinged with ochraceous; scutellum shining black; corium purplish red, the clavus sometimes much darker; membrane subhyaline, but reflecting the black abdomen beneath; body beneath ochraceous, lateral areas of the pro- and metasterna, and nearly the whole of the mesosternum black; anterior femora testaceous, intermediate and posterior femora black, all the femoral apices ochraceous, fore and intermediate tibiæ dull ochraceous, tarsi and posterior tibiæ black or blackish; antennæ black, base of first joint ochraceous, second, third, and fourth joints almost subequal in length; pronotum with the anterior area transversely, sinuately impressed, the remaining area more or less strongly punctate; scutellum transversely carinate before base, and thence longitudinally earinate to apex; corium thickly but very finely punctate; membrane slightly, but distinctly, passing the abdominal apex.

Loug. 8 mm.

Hab. North Queensland; Kuranda (F. P. Dodd).

Scopiastes linearis, sp. 11.

Body above (excluding membrane) and body and legs beneath ochraceous; membrane subhyaline and reflecting the dark ochraceous abdomen beneath; apices of the strongly dilated eyes purplish red; antennæ ochraceous, the extreme apices of the joints black, second joint longest, third slightly shorter than fourth; pronotum blackly punctate, a central longitudinal line and two spots near each posterior lateral angle black; sentellum finely, sparsely, blackly punctate, concavely transversely carinate near base, and thence longitudinally carinate to apex; corium with the longitudinal veins more or less black; membrane distinctly passing the abdominal apex; femora distinctly, minutely, blackly punctate.

Long. $4-4\frac{1}{2}$ mm.

Hab. North Queensland; Kuranda, 1-100 ft. (R. E.

Turner).

We have also received this species, collected in the same habitat, by Mr. F. P. Dodd.

Oncopeltus vagus, sp. n.

Ochraceous or testaceous; head, antennæ, anterior area of pronotum sometimes centrally connected with narrow posterior margin, basal area of scutellum, a somewhat broad central transverse fascia and apical angle to corium, membrane, sternum—excluding basal lateral angles of prosternum and basal margin of metasternum,—about posterior half of abdomen beneath, legs, and rostrum black; antennæ with the second joint considerably the longest; pronotum prominently, centrally, longitudinally carinate, the lateral margins broadly recurved; scutellum centrally longitudinally carinate; membrane with two white spots, one at basal angle, the other near middle and transverse.

Long. 10-11 mm.

Hab. Aru and Admiralty Islds. ('Challenger' Exped.); Mysol Isld. (Wallace); Port Darwin.

Allied to O. dispar, Walk., from the Moluccas.

Oncopeltus consors, sp. 11.

Head and pronotum testaceous; anterior area and posterior margin of pronotum darker, sometimes black, and also sometimes narrowly centrally connected; scutellum fuscous, the basal area black; corium dark ochraceous, with a somewhat narrow, transverse, central fascia and the extreme apical angle black; membrane piceous, the veins black, and with two small white spots, one at basal angle, the other central; body beneath testaceous; trochanters, coxæ, and about apical half of abdomen beneath castancous, legs black or blackish; rostrum black; antennæ black, the second and fourth joints longest and subequal in length; pronotum centrally, longitudinally, prominently carinate, the lateral margins broadly moderately recurved; membrane scarcely passing abdominal apex.

Long. 10-11 mm.

Hab. Queensland (F. P. Dodd).

Oncopeltus nigroflavatus, sp. n.

Pale ochraceous; antennæ, pronotum (excluding posterior

lateral areas), scutclium, a somewhat broad central transverse fascia to corium, membrane, legs (including trochanters and coxæ), rostrum, and apical area of abdomen beneath black; membrane with two white spots, one at basal angle, the other before middle; pronotum broadly contracted at anterior area, centrally longitudinally carinate, the lateral margins broadly recurved; antennæ mutilated, but second joint probably longest, remaining joints absent.

Long. $11\frac{1}{2}$ mm.

Hab. N. Queensland; Mossman.

Oncopeltus niloticus, sp. n.

Stramineous; head, antennæ, about posterior half of pronotum, sentellum, central transverse fascia to corium, membrane, rostrum, legs, lateral margins (more or less) of meso- and metasterna, central and lateral spots to fourth abdominal segment, and almost the whole of apical segment black; a pale greyish spot at base and on disk of membrane; antennæ finely pilose, the second joint longest, fourth very slightly longer than third; head above moderately convex, smooth, almost impunetate; pronotum broadly transversely and longitudinally carinate on anterior half, longitudinally extending into the upper half of the basal black area, the basal margin sinuate, the posteriorangles broadly, moderately, posteriorly produced; scutellum moderately, centrally, longitudinally carinate; veins to corium prominent.

Long. $7\frac{1}{2}$ mm.

Hab. Blue Nile (E. S. Crespin).

Oncopeltus erebus, sp. n.

Head above, pronotum, and seutellum black, the first with a small testaceous spot at base; corium black, the basal and apieal areas fuscous brown; membrane with a small spot at basal angle and a transverse spot before middle greyish white; head beneath testaceous, the lateral and basal areas fuscous; sternum and abdominal margins beneath ochraceous, anterior area of prosternum and basal area of mesosternum testaceous; an oblique lateral fascia on each side of prosternum, anterior area of mesosternum, nearly the whole of metasternum, abdominal segments (excluding margins), rostrum, and legs black; antennæ mutilated; pronotum with a central longitudinal earination not reaching base and crossed before each extremity with a short transverse carinate line, the basal margin somewhat

strongly concave, the lateral angles broadly posteriorly produced; scutellum moderately convex and centrally carinate; lateral margins of head, pronotum and corium, and the legs distinctly pilose; rostrum reaching the posterior coxæ.

Length 14 mm.

Hab. Brit. E. Africa; Ngarenarok, Masai Reserve (Capt. A. O. Luckman).

Microspilus sternalis, sp. n.

Head and pronotum testaceous, the discal area of the latter more ochraceous; scutellum and corium testaceous, the latter with a transverse black fascia behind middle; membrane dark indigo-blue with the veins black, a pale fuscous spot at basal angle and another on basal margin, a small transverse spot on disk of basal area, and narrow apical margin greyish white; body beneath testaceous red, the central areas of the sternal segments dull greyish; apex of abdomen and the legs black; femora (excluding bases and apices) testaceous red; antennæ mutilated; pronotum with the lateral margins sublaminate, convex, and moderately upturned; scutellum broadly, coarsely, transversely carinate near base and thence centrally much more narrowly longitudinally carinate to apex; veins to corium very prominent; rostrum reaching the posterior coxæ.

Long. 16 mm. Hab. Madagascar.

Lygæus lagosensis, sp. n.

Reddish testaceous; antennæ, extreme apex of head, narrow anterior margin of pronotum from which emerge two angulated lines barely extending to middle, and narrow posterior margin from which emerge two short angular projections, basal margin of scutellum, membrane, antennæ, rostrum, legs, sternal segmental margins, and apical abdominal segment black or blackish; antennæ somewhat robust, second joint longest; scutellum robustly, globosely, transversely carinate at basal margin and then robustly, broadly, longitudinally carinate to apex; veins to corium very robust; rostrum about reaching posterior coxæ.

Length 13 mm.

Hab. Lagos (Hinterland) (J. W. Rowland), Allied to L. furcatus, Fabr.

Lygeus tonkineusis, sp. n.

Head above sanguineous, eyes, a broad basal maculation gradually attenuated anteriorly and reaching apex, and the antenne black; pronotum and corinm pale testaceons, inclining to violaceous; two large basal pronotal spots, almost meeting centrally and scarcely separated from the lateral margins, scutellum (excluding central carination), a somewhat oblongly rounded spot just before the apical incisure of clavus, a much larger spot near middle of corium, which is rounded inwardly and truncated at lateral margin of corium, and the membrane black, apical margin of the latter greyish white: body beneath dark testaceous; legs, rostrum, antennæ, and apical abdominal segments black; basal joint of rostrum testaceous and basal joint of antennæ somewhat of that colour; second joint of antennæ much the longest, third a little shorter than fourth; pronotum moderately transversely and longitudinally earinate, sentellum longitudinally carinate; rostrum about reaching the posterior coxæ.

Long 8-9 mm.

Hab. Indo-China; Tonkin, Ban Son Moi (R. Vitalis de

Salvaza).

Allied to L. melanospiloides, Montand., L. autolycus, Dist., and L. fimbriatus, Wall., and belonging to the subgenus Tropidothorax, Berg., n.n. = Melanospilus, Stål, nom. præoce.

Graptostethus inornatus, sp. n.

Reddish ochraceous or testaceous; apex of head, a basal spot contiguous to eyes, a central transverse fascia on anterior area of pronotum not nearly reaching the lateral margins shortly posteriorly attached to two discal rotundate spots, scutellum, membrane, body beneath, legs, rostrum, and antennæ black; posterior margins of corium and posterior margins of sternal segments ochraceous; body beneath and legs finely greyishly pilose, the posterior abdominal segmental margins narrowly obscurely ochraceous, the lateral sternal areas with prominent dark black spots, lateral margins of sternum and abdomen beneath testaceous; second joint of antennæ longer than third; pronotum centrally, faintly, longitudinally carinate; scutellum broadly and coarsely basally and centrally carinate; membrane slightly passing the abdominal apex and with its

apical margin greyish white; rostrum reaching the posterior coxæ.

Long. 8 mm.

Hab. Malay Archipelago; Andai (W. Doherty). Batchian (Wallace).

Graptostethus parvinotatus, sp. n.

Testaceous; central longitudinal fascia to head, eves, two oblique transverse incisures on anterior area of pronotum followed by four small discal spots in two transverse series. corium with the outer claval margin and two elongate discal spots in oblique series on disk, membrane, prominent lateral spots on sternal segments, rostrum, and antennæ black; legs fuscous, thickly pilose; anteunæ with the second joint considerably longest; scutchlum not rugosely carinate; apical margin of corium narrowly faintly ochraceous; rostrum about reaching or very slightly passing the posterior coxæ; body beneath distinctly, finely, thickly pilose, the apical segments more or less suffused with black.

Long 9 mm.

Hab. Siamese Malay States; Biserat (Annandale and Robinson).

Graptostethus parvus, sp. n.

Head, pronotum, scutellum, and corium ochraceous; a broad central longitudinal fascia to head, two broad discal longitudinal fasciæ connected with a similar transverse anterior fascia to pronotum, two large contiguous basal spots to scutellum, interior claval margin and a submarginal elongate spot on posterior half of corium and extreme apical margin of same, large lateral spots to sternal segments, antennæ, rostrum, and legs black; abdomen above sanguineous, its apex black; antennæ with the second joint distinctly longer than the third, but scarcely longer than the fourth; pronotum and scutellum distinctly somewhat coarsely punctate; scutellum centrally longitudinally carinate; legs thickly pilose; abdomen beneath finely, somewhat obscurely pilose, its apical segments more or less suffused with black; rostrum about reaching posterior coxæ.

Long. 6 mm.

Hab. Queensland; Townsville (F. P. Dodd).

Allied to G. cardinalis, Stål.

Graptostethus electus, sp. n.

Sanguineous; head with apex of central lobe and a basal spot contiguous to eyes, pronotum with a broad, anterior, transverse fascia connected with two broad, longitudinal, sublateral fasciæ reaching base, basal margin of scutellum; clavus connected with a small outer longitudinal spot at base and with a transverse fascia at its apex, which is continued along lateral margin of corium to apex black; antenuæ, rostrum, sternum (excluding lateral margins), legs, and apex of abdomen beneath black; anterior and intermediate femora (excluding bases) sanguineous; antennæ with the second, third, and fourth joints almost subequal in length, second slightly the longest; pronotum distinctly, centrally, longitudinally earinate on about posterior twothirds; scutellum transversely rugosely earinate at base, thence more finely longitudinally carinate to apex; corium with the veins moderately prominent; membrane greyish white, black at base, distinctly passing abdominal apex; rostrum reaching posterior coxæ.

Long. 9-10 mm.

Hab. Brit. East Africa; Voi, 1800 ft., Simba, 3350 ft., West Slopes of Kenya, on Meru Nyeri Rd. (S. A. Neave). 30 miles from Magadi Junc. (F. G. Hamilton). Nairobi (Dr. A. D. Milne).

Graptostethus grandis.

Graptostethus grandis, Dist. Ann. & Mag. Nat. Hist. (7) vii. p. 537 (1901).

This species proves to be of a slightly variable character; the scutellum is in some specimens totally black and the outer margins of clavus also of that colour. The abdomen beneath in some varieties is almost wholly black.

Hab. Nyasaland, Fort Johnson (P. Rendall); Mlanje (S. A. Neare). Congo Free State, Kambove, Katanga (S. A. Neave). Uganda, Entebbe, and Buamba Forest, Semliki Valley (S. A. Neave).

Graptostethus rufus, sp. n.

Reddish ochraceous; apex of head, anterior margin and two small spots on anterior area of pronotum, basal margin of scutellum, membrane black; body beneath, legs, rostrum, and antennæ black; lateral margins of head, sternum, and abdomen reddish ochraceous; sternal segmental transverse margins and coxal spots greyish white; abdomen beneath

more or less suffused with reddish ochraceous and the abdominal segmental margins very narrowly of that colour; a pale fuscous spot at base of membrane; second and fourth joints of antennæ longest and subequal in length, each distinctly longer than third; pronotum very indistinctly longitudinally carinate; membrane scarcely or very slightly extending beyond abdominal apex.

Long. 10-12 mm.

Hab. Uganda Prot. (C. C. Gowdey), Buamba Forest, Semiliki Valley, 2300-2800 ft., Mpanga Forest, Toro, 4800 ft., and Daro or Durro Forest, Toro, 4000 to 4500 ft. (S. A. Neave).

In some varieties the anterior black margin of the pronotum is much enlarged and extends to and absorbs the two small anterior spots, in other specimens again these pronotal spots are entirely absent.

[The types and other specimens described or referred to in this paper are all contained in the British Museum.]

LII.—Two new Diptera from Trinidad. By F. W. Edwards.

THE two species diagnosed below were sent me for determination by Mr. C. B. Williams, who, in company with Mr. F. W. Urich, collected them at Guacharo cave, Trinidad—the *Trichobius* on an undetermined bat, the Tipulid on the walls of the cave. Co-types of the former and the type of the latter have been presented by the collectors to the British Museum; further reference to them will be made in their forthcoming paper on the cave fauna.

Trichobius cacus, sp. n.

Eye-spot unfacetted. Mesonotum uniformly covered with rather short bristles, those on the front margin not longer than the rest. Scutellum with four long bristles. Longitudinal suture of the mesonotum short, bifurcated behind, extending barely one-third of the distance from the front margin to the transverse suture. Anterior angle of metasternum about 95°.

Length 1.8 mm.

According to specimens in the British Museum from Basin